

[54] **EXCITED FRAME, VIBRATORY CONVEYING APPARATUS FOR MOVING PARTICULATE MATERIAL**

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[57] **ABSTRACT**

An excited frame, vibratory conveying apparatus is described for efficiently conveying particulate material. The apparatus has an elongated conveying member mounted by beam springs on an excited frame means. The excited frame means has a balanced vibratory drive means for vibrating the excited frame along a line of force that passes through the center of mass of the apparatus and preferably through the center of masses of conveying member and the excited frame means. The ratio of the weight of the conveying member to the weight of the excited frame means should be between 1.5 and 3.5 and preferably between 2.5 and 3.5. Such an arrangement provides for minimum transmission of vibration both horizontal and vertical into the stationary supporting structure and further minimizes rocking motion.

5 Claims, 7 Drawing Figures

